

Louisville Metro

Multi-Hazards Mitigation Plan

SECTION 2.0 THE PLANNING PROCESS

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2.0 THE PLANNING PROCESS

The objective of the updated five-year Plan is to produce a mitigation plan with a program of activities to further identify Louisville Metro's vulnerability to natural and man-made hazards so a mitigation strategy can be developed to eliminate or reduce losses. The updated Plan uses the same planning process as the 2005 plan and stakeholders are again at the center of the process.

The updated Plan was developed using broad based and diverse community participation activities, and contains the same five phases as the 2005 Plan. The hazard categories included in the updated Plan are consistent with the 2005 Plan and include:

- Flood-Related Hazards (river and flash flooding, dam failures) that include flood hazard areas as defined by FEMA in the digital-Flood Insurance Rate Maps (DFIRMs), Map Modernization, and the NFIP insurance data, as well as other local historical data.
- Wind-Related Hazards (winter storms, thunderstorms, hail, and tornadoes) based on information provided by the National Weather Service (NWS).
- Heat-Related Hazards (extreme heat, drought, wildfires) based on local historical data, the NWS, and other plans/sources.
- Geologic Hazards (earthquakes, landslides, karst and sinkholes) based on soils data, local historical information, and other plans/sources.

In addition, man-made hazards were incorporated into the updated Plan. Man-Made Hazards were determined by local history and experience and consideration focused on hazardous materials, chemical spills and/or fires.

During the five-year update planning process, areas at-risk in Louisville Metro were identified, mapped, assessed, and vulnerabilities determined so that an appropriate mitigation strategy could be developed for multi-hazards. The Plan reviews historic data, assesses vulnerability to future potential disasters, reviews development trends and current landuses, and develops a mitigation strategy to reduce the affects of disasters. This mitigation plan is based upon the best available data and provides a blueprint for reducing the potential losses identified in the risk assessments.

Summary of the Benefits of Mitigation Planning

- Leads to cost-effective selection of risk reduction actions
- Builds Partnerships
- Contributes to sustainable communities
- Establishes funding profiles

Section 2 provides a description of the planning process and the planning guidelines for the CRS program and the DMA 2000 requirements. Also detailed are the roles for the Plan Development Team (Project Staff and an Advisory Committee). The section also describes the documentation requirements, timeline, how the Advisory Committee participated, public





outreach, and how the public was kept apprised of the plan's development. The section also outlines Louisville Metro's existing plans, studies, and reports and details the prerequisite for local adoption of the Plan and the submission process to KyEM, FEMA, and local government.

2.1 Planning Requirements

Updating the Plan includes the same five basic phases / steps as used in the 2005 Plan. Steps include: a planning process, a comprehensive risk assessment, developing a mitigation strategy and a plan maintenance process for the future, and adopting the plan.

2.1.1 Community Rating System (CRS) Program

FEMA supports an all-hazards approach to mitigation, as does the CRS. It makes economic sense that mitigation programs address as many hazards as are appropriate. An all-hazards approach also ensures that staff, programs, construction standards, and public information messages are consistent and mutually supportive.

In addition to the DMA 2000 Planning Requirements, the CRS 10-step planning and floodplain management requirements were utilized to guide the Louisville Metro planning process with a particular focus on flooding and repetitive loss. The CRS 10-step planning process is consistent with the multi-hazard planning regulations under 44 CFR Part 201 (see comparisons in the next section).



2.1.2 Planning Guidance Documents

The Project Staff used the following guidance to develop the updated Plan:

- FEMA 2005 Louisville Metro Local Hazard Mitigation Plan Review Crosswalk
- Local Multi-Hazard Mitigation Planning Guidance, FEMA, July 1, 2008
- Blue Book -- Multi-Hazard Mitigation Planning Guidance, FEMA, March 2004 (Rev. Nov, 2006 & June, 2007)
- Using Benefit-Cost for Planning in Mitigation Planning State and Local Mitigation Planning How-To Guide Number Five, FEMA 386-5, May 2007
- Community Rating System (CRS) Criteria for Floodplain Management Planning and Repetitive Loss Area Analysis, FEMA
- FEMA's Reducing Damage from Localized Flooding: A Guide for Communities
- CRS 10- Step Planning, 2007 CRS Coordinator's Manual

The CRS 10-step planning process is consistent with the multi-hazard planning regulations under 44 CFR Part 201. However, CRS provides additional points for activities that communities can take during their planning process that go above the minimum DMA requirements. Although communities are not required to participate in CRS in order to receive approval of a Local Mitigation Plan, FEMA encourages jurisdictions to integrate the CRS planning steps into their multi-hazard mitigation plans.



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CRS TEN-STEP PLANNING PROCESS

- Step 1: Organize to Prepare the Plan
- Step 2: Involve the Public
- Step 3: Coordinate With Other Agencies
- Step 4: Assess Hazard/s
- Step 5: Assess Problem/s
- Step 6: Set Goals
- Step 7: Review Possible Activities
- Step 8: Draft an Action Plan
- Step 9: Adopt the Plan
- Step 10: Implement, Evaluate, and Revise

DMA 2000 PLANNING REQUIREMENTS

The Planning Process

- Open Public Involvement
- Review and Incorporation of Materials

Risk Assessment

- Identifying Hazards
- Profiling Hazard Events
- Assessing Vulnerability: Identifying Assets and Estimating Potential Losses
- Analyzing Development Trends

Mitigation Strategy

- Develop Local Hazard Mitigation Goals
- Identification and Analysis of Mitigation Measures
- Implementation of Mitigation Measures

Plan Maintenance Procedures

- Develop Process for Monitoring, Evaluating & Updating the Plan
- Include Implementation Through Existing Programs
- Continued Public Involvement

Submit Plan to KYEM & FEMA for Review (Revise Accordingly)

Public Meeting

Adoption by Local Governing Body

2.2 Developing the Planning Process

The Louisville Metro planning process was designed to maximize stakeholder involvement and participation, which is essential in creating a viable mitigation strategy and to ensure the mitigation strategy is implemented through local programs and regulations. Public involvement was an integral part of the development of the Plan and ensured the Plan is supported by a broader cross section of public and private stakeholders.

Louisville Metro's planning process provided an opportunity for the public to comment on the plan during its formation as well as an opportunity for any neighboring communities, local and regional agencies, businesses, and other interested parties to participate in the planning process. This public involvement, along with the review of any existing plans, studies, reports, and technical information, assisted in the development of a comprehensive approach to reducing losses from multi-disasters.

Planning Process Open Public Involvement

§201.6(b) requires that there be an open public involvement process in the formation of a plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
- (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.



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Louisville Metro already has a strong foundation for the mitigation planning process through its past emergency management, grants, mitigation projects, and mapping efforts. Louisville Metro's successful planning activity involved bringing together a cross-section of the public to reach consensus on how to achieve a mitigation strategy.

In early 2010, the Project Coordinator contacted the State National Flood Insurance Program (NFIP) Coordinator, KyEM, KY Division of Water (DOW), and FEMA Region IV to state the intent of developing a multi-hazards mitigation plan and requested participation, assistance, and resources.

2.2.1 Plan Development Team Members

A local Plan Development Team designed and developed the Plan. The Plan Development Team is comprised of Project Staff and an Advisory Committee. The Development Team roles, agendas and schedule are outlined in this section.

2.2.1.1 Project Staff Role

Project Staff represents in essence the same mitigation specialists, engineers, MSD staff, and Metro Government staff who coordinated the 2005 Plan. This Project Staff has dedicated themselves to the development and administering of effective disaster planning, as demonstrated by the local Floodplain Management Plan and the 2005 Natural Hazards Mitigation Plan. The Project Staff roles include a Program Coordinator, GIS Specialists, a Mitigation Specialist, and Technical Advisors.

- Program Coordinator: Jim McKinney
- Mitigation Specialist: Pamela Moore
- Technical Advisors: Bob Smith, Jon Henney, David Johnson, Lori Rafferty, and Justin Gray
- GIS Specialists: Curt Bynum and Josh Human

Bob Smith again serves as the Chair of the Advisory Committee and as such conducts meetings, oversees committee response, and ensures the planning process is all inclusive. Project Staff was responsible for convening the Advisory Committee and public meetings.

Public involvement included public meetings, one-on-one interviews by Project Staff, phone interviews, and contact with various officials from Metro offices, and State and Federal agencies. Project Staff documented all steps taken in the development of the Plan and was responsible for all aspects of the Plan development including collecting data, reviewing plans/studies, facilitating public input, drafting the Plan, and for all required documentation. In addition, Project Staff facilitated the process to review the hazard assessments and profiles, assisted in developing a mitigation strategy, including the design of a detailed action plan, and stakeholder participation.

The Planning Process

The planning process is as important as the plan itself. Hence, the regulation at 44 CFR Part 201 requires a narrative description of the process used to develop the mitigation plan—a systematic account about how the mitigation plan evolved from the moment the planning team was created and the public participated, to how each section of the plan was developed, to what plans or studies were incorporated into the plan, to how it will be implemented.



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The planning process serves as a permanent record that explains how decisions were reached on a strategy to reduce losses and that it was developed with stakeholder input in a methodical and reasonable way. The Planning Process sets up the method for the Advisory Committee to continue to make decisions in a pre- and post-disaster environment to decrease vulnerability to community hazards.

2.2.1.2 Convening an Advisory Committee

The existing Louisville Metro Natural Hazards Mitigation Plan members, as well as others, were requested to serve as public and private stakeholders for the five-year Plan update. The Advisory Committee represents hazard-related agencies/organizations from local, state, and federal agencies, as well as community representatives, local business leaders, academia, government, businesses, public health and hospitals, neighborhoods, citizens, and volunteer/public service organizations. New members were added to the Advisory Committee to address man-made hazards and to provide citizen input.

The Advisory Committee includes a cross-section of the community with over 60 agencies / organizations. As public and private stakeholders, the Advisory Committee contributed to open public involvement and advised their constituents of the planning process. The Advisory Committee is composed of staff from those community departments that will be implementing the majority of the plan's recommendations and represent the public at-large.

Advisory Committee Representatives
Air Pollution Control District (APCB)
AMEC Earth and Environmental *
American Red Cross (ARC)
Anchorage Representative *
BA Engineers *
Baptist Hospital East (BHE) *
Bellarmino University *
Churchill Downs *
Citizen
Citizen *
Citizen *
Downtown Development
Ford Kentucky Truck Plant *
Ford Louisville Assembly *
Home Builders Association of Louisville (HBAL)
HOSPRUS -Hospice of Louisville
Jefferson County Property Valuation Administrator (PVA)
Jefferson County Public Schools (JCPS)
Jeffersontown Representative *
Jewish Hospital & St. Mary's HealthCare (JHSMH) *
Kentucky Community & Technical College System (KCTCS) *
Kentucky Department of Public Health (KyDPH)
Kentucky Division of Emergency Management (KyEM)
Kentucky Division of Emergency Management local Area
Kentucky Division of Water (KDOW)
Kentucky Geological Survey (KGS)
Kentucky Volunteer Organizations Active in Disaster (VOAD)
KIPDA, Area Development District
Louisville & Jefferson County MSD
Louisville & Jefferson County MSD Haz-Mat *
Louisville Fire & Rescue
Louisville Gas & Electric Co. (LG&E)

Advisory Committee Representatives
Louisville Metro Department of Codes & Regulations (C&R)
Louisville Metro EMS (LMEMS)
Louisville Metro Government Public Works and Assets
Louisville Metro Parks
Louisville Metro Planning & Design Services (PDS)
Louisville Metro Police Dept (LMPD)
Louisville Metro Public Health & Wellness
Louisville Regional Airport Authority *
Louisville Water Co (LWC)
Louisville/Jefferson County EMA Haz-Mat *
Medical Reserve Corp. (MRC)
Metro United Way
MetroCall
Metropolitan Medical Response System (MMRS) *
National Weather Service (NWS)
Norton Healthcare *
Samaritan Global *
Southern Baptist KY Disaster Relief *
Spalding University *
St Matthews Representative *
Suburban Fire Districts
TARC
TRIMARC
United Parcel Service (UPS) Airlines *
University of Louisville (U of L)
University of Louisville Hospital
University of Louisville, Center for Hazards Research
URS Corporation
<i>* New members to the Advisory Committee for the updated Plan</i>

See Appendix 2.1 for a complete list of the local Plan Development Team members.



2.3 Public and Local Government Commitment

An open public involvement process ensures that all citizens understand risks and vulnerability so that they will work with the jurisdiction and support policies, actions, and tools that over the long-term will lead to a reduction in future losses. The planning objective is to reach all stakeholders during the process, whether public or private. Moreover, the planning process relied on stakeholder involvement and participation as the main source of guidance for all phases of the plan. The majority of public involvement was from the Advisory Committee.

2.3.1 Partnering Agreement and Resolution

The Louisville Metro Multi-Hazards Mitigation Advisory Committee signed a Partnering Agreement during the Public Meeting Kick-Off (April 13, 2010). The Partnering Agreement includes the Mission Statement, signatures, and states the commitment to the planning process by the Advisory Committee. The signed Partnering Agreement is in Appendix 2.2.

The signed Partnering Agreement was introduced to Louisville Metro's 26-member Metro Council early in the planning process to encourage commitment to the Plan. As a result, the Metro Council agreed to formally recognize the planning process and the Plan Development Team by sponsoring a Resolution Authorizing Metro Government to Endorse Its Hazard Mitigation Plan Update dated August 30, 2010. The Resolution is in Appendix 2.3. The Resolution and Partnering Agreement shows early support of the Plan from Louisville Metro's governing body and Advisory Committee. The text of the Partnering Agreement follows.

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April 13, 2010

MISSION STATEMENT

The 2010 Louisville Metro Multi-Hazard Mitigation Plan will be a proactive and cooperative program to help our community be better prepared to prevent and reduce losses from manmade and natural disasters.

PARTNERING AGREEMENT

We, the members of the Louisville Metro Multi-Hazard Mitigation Plan Development Team, are committed to working to establish unity and open communication in the implementation of a comprehensive multi-hazard mitigation plan.

We pledge our representation as a partner in the goal to develop:

- A Disaster Resistant Community
- An appropriate Hazard Mitigation Plan and Mitigation Strategy
- Regulatory practices
- Maximum community trust, support, and involvement

To maintain the Multi-Hazard Mitigation Plan as a working plan, we pledge to reconvene quarterly to keep our goals and recommendations viable. As we achieve the priority recommendations in the Plan, we will report on the progress to the community and continue to update the plan for the future.



2.3.2 Advisory Committee Role

The Advisory Committee provided input and comment on the plan at all stages of the planning process and met throughout a year-long process to review, assist, and provide input in developing the Risk Assessment and Mitigation Strategy. During the planning process, the Advisory Committee:

- Developed a mission statement and a Partnering Agreement
- Provided input on development of the public involvement process
- Analyzed and reviewed hazard data for the risk assessments
- Created a mitigation strategy
- Established local mitigation goals and objectives
- Determined the procedure for the implementation of mitigation measures
- Established plan maintenance procedures
- Provided comment on the final plan content

The Advisory Committee reviewed the hazard assessments and profiles, assisted in developing a mitigation strategy, including the design of a detailed action plan. The Risk Assessment provided the Plan Development Team with a basis for hazard mitigation planning. As a result, the necessary information was available to identify and prioritize appropriate mitigation actions, to reduce losses from identified hazards, make informed future landuse and zoning decisions, design better infrastructure, and keep the public out of harm's way. The Advisory Committee oversaw the process as well as ensured actions were incorporated in their respective agencies for hazard mitigation.

Planning Phases

Advisory Committee Timeline

- 1. The Planning Process**
 - Convene an Advisory Committee
 - Public Meeting: Open Public Involvement
 - Review and Incorporation of Materials
- 2. Risk Assessment**
 - Identify Hazards
 - Profile Hazard Events
 - Assess Vulnerability: Identifying Assets and Estimating Potential Losses
 - Analyzing Development Trends: Population and Landuse
- 3. Mitigation Strategy**
 - Outline Problems and Concerns
 - Develop Local Hazard Mitigation Goals and Objectives
 - Identify and Analyze Mitigation Measures
 - Develop Implementation of Mitigation Measures in a Five-Year Action Plan
- 4. Plan Maintenance Procedures**
 - Develop Process for Monitoring, Evaluating & Updating the Plan
 - Include Implementation Through Existing Programs and Five-Year Action Plan
 - Develop method for continued Advisory Committee and Public Involvement
- 5. Prerequisites**
 - Submit Draft Plan to KyEM & FEMA for Review (Revise Accordingly)
 - Public Meeting
 - Adoption by Local Governing Body



2.3.2.1 Advisory Committee Schedule

In total, the Advisory Committee attended 11 meetings and two public meetings at the beginning and the end of the process. On March 30, 2010, Project Staff convened the Advisory Committee for a kick-off meeting. New members attended an hour-long Orientation about hazard mitigation planning. At the Advisory Committee meeting, members were assigned key roles; established a meeting schedule; set agendas and a timeline, and received numerous handouts. The Advisory Committee also reviewed the 2005 Partnering Agreement and drafted changes to the language.

Advisory Committee meetings are hosted by participating agencies that not only provide a meeting place, but a tour of their facilities and explanations of emergency and mitigation programs. Following is a summary of the Advisory Committee Meeting schedule and purpose of the meeting.

DATE	PURPOSE OF MEETING	HOST LOCATION
2010		
March 30	Orientation for New Members and Kick-Off for Planning Process	LG&E, Auburndale
April 13	Public Meeting	U of L Shelby Campus
May 11	Identify Hazards	MSD's Central Maintenance Facility
May 25	Data Collection and Identify Hazards	McMahan Fire Protection District
June 23	Identify Hazards, Haz-Mat	Metro United Way
July 28	Begin Risk Assessment	Air Pollution Control Board
August 18	Risk Assessment	Baptist Hospital East
September 15	Finalize Risk Assessment/ Begin Mitigation Strategy/ Presentations from Representatives/ Convene in Subcommittees	Baptist Hospital East
October 19	Mitigation Strategy/ Convene in Subcommittees	Baptist Hospital East
November 16	Mitigation Strategy Funding/ Action Plan Convene in Subcommittees	Cedar Ridge Camp
2011		
February 16	Finalize Action Plan/ Develop Plan Maintenance Procedures	USGS
March 22	Final Review of draft Plan	Lyndon City Hall
June 2	Public Meeting for Draft Plan	Air Pollution Control Board

2.3.2.2 Documentation of the Planning Process

A comprehensive description of the planning process informs citizens and other readers about the plan's development. Leadership, staffing, and in-house knowledge in local government may fluctuate over time. Therefore, the description of the planning process serves as a permanent record that explains how decisions were reached on a strategy to reduce losses, and that it was developed with stakeholder input in a methodical and reasonable way. Leaders can then continue to make decisions in a pre- and post-disaster environment to decrease vulnerability to community hazards.

The Planning Process

§201.6(c)(1) requires the documentation of the planning process, including how the plan was prepared, who was involved in the process, and how the public was involved. An open public involvement process is essential to the development of an effective plan.



Project Staff documented all steps taken in the development of the Plan. These steps are described in the Plan and include how the public was involved, the timeframe for preparing the Plan, development of planning activities, data collection, how the risk assessment and vulnerability assessments were developed, how each part of the mitigation strategy was developed, how the plan maintenance procedures were established, and the process of plan adoption.

Advisory Committee meeting documentation includes: sign-in sheets, agendas, handouts and meeting summaries. See Appendix 2.4 for a compilation of Advisory Committee agendas and Appendix 2.5 for the attendance list. All other documentation is located in the offices of EMA.

2.4 Review and Incorporation of Existing Plans, Studies, Reports, and Technical Information

Early in the process, Project Staff assisted in collecting the best available data required to complete the risk assessment and ensured coordination with relevant Federal and State agencies for input and technical assistance. Project Staff coordinated with numerous agencies seeking local hazard data, existing plans, partnerships, common goals, projects, and commitment to a multi-hazards mitigation plan.

Additionally, local stakeholder agencies were requested to review common problems, development policies, mitigation strategies, and inconsistencies and conflicts in policies, plans, programs, and regulations. Project Staff also coordinated with experts from local agencies and universities and researched national data hazard sources to ensure all available information was reviewed and presented to the Advisory Committee and used in the Risk Assessment.

Following are examples of the Existing Plans, Studies, Reports, Technical Information and Programs integrated or utilized for the updated Plan.

- *2007 and 2010 Kentucky State Hazard Mitigation Plans* were invaluable and thoroughly reviewed and incorporated, as appropriate.
- *Emergency Operations Plan (EOP)*: Louisville Metro creates and maintains an emergency response plan in accordance with KRS Chapters 39A to 39F. The EOP was a source for hazard analysis and hazard maps. Analysis includes organizational charts and mutual aid agreements. The EOP also proved to be a valuable source of information for both the risk assessment and the vulnerability assessment for this hazard mitigation plan. Following is the EOP Table of Contents which outlines the Emergency Support Function (ESF) topics covered by the local EOP:
 - ESF 1 - Transportation
 - ESF 2 - Communications
 - ESF 3 - Public Works & Engineering
 - ESF 4 - Fire Fighting
 - ESF 5 - Emergency Management
 - ESF 6 - Mass Care
 - ESF 7 - Resource Management
 - ESF 8 - Health & Medical
 - ESF 9 - Urban Search & Rescue
 - ESF 10 - Hazardous Materials
 - ESF 11 - Food & Water
 - ESF 12 - Energy
 - ESF 13 - Law Enforcement and Security
 - ESF 14 - Public Information
 - ESF 15 - Volunteers & Donations
 - ESF 16 - Animal Services
 - Incident Command System
 - Homeland Security Terrorism Annex



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- Chemical Terrorism
- Biological Terrorism
- Hazardous Materials Annex Q
- National Disaster Medical System/Strategic National Stockpile/Chempack
- Mass Fatalities Plan
- *MSD and Army Corps of Engineers projects.* MSD has a long, established history of a partnership with the Louisville District Army Corps of Engineers. MSD has worked with the Army Corps of Engineers on the Ohio River Flood Protection System, floodplain modeling, Flood Insurance Studies (FIS), greenway projects, flood protection programs, and wetlands banking programs.

To learn about the following MSD community programs and studies, go to <http://www.msdlouky.org/programs/crssite/fpindex.html>

- *National Flood Insurance Program:* The City of Louisville and Jefferson County both became an NFIP (National Flood Insurance Program) community in 1978/79.
- *Flood Insurance Rate Map (FIRM):* In 1993/4, through LOJIC, MSD worked with FEMA to digitize the Jefferson County FEMA Flood Insurance Rate Map (DFIRM) into the GIS and obtained FEMA approval as the official floodplain maps for the county. On February 2, 1994, the GIS-based FIRMS became effective. Updated in again in 2006, the DFIRMS are maintained in the LOJIC GIS and used to enforce floodplain regulations and the local floodplain ordinance.
- *Community Rating System (CRS) Program:* Beginning in 1990, both Louisville and Jefferson County volunteered to join the CRS Program. The MSD is the CRS Program Coordinator and is responsible for completion of all CRS activities. Louisville Metro ranks a Class 5 Rating due to strong stormwater, floodplain, mapping, and emergency service programs. As a result, residents receive a 25% discount on flood insurance premiums. A Class 5 Rating is the highest-class rating in Kentucky.
- *Floodplain Management Plan:* The local Floodplain Management Plan (FPMP) adopted in 2006 meets CRS criteria and was the foundation for the local flood analysis and risk assessment for the updated Plan. The FPMP is recognized by FEMA as a Flood Mitigation Assistance (FMA) plan.

Other MSD studies, plans and publications:

- *Water Quality in Jefferson County, Kentucky: A Watershed Synthesis Report, 2000-2007.* Prepared by Department of Biology, University of Louisville (U of L) and MSD, December 2009.
- *Stormwater Quality Management Plan, Chapter 1.4.* Prepared by MSD, October 2008.
- *Louisville Metro Stormwater Management Master Plan.* Prepared by MSD, August 2010.

Existing programs, plans, reports, and studies are incorporated or referenced throughout the Plan. See Section 3.0 for descriptions of collected data and program data. See Section 4.0 and Appendices for a detailed Capability Assessment analysis of state and local landuse and code summaries as well as existing plans, ordinances, landuse regulations, and technical information.



2.5 Opportunity for Public/Private Participation and Comment

Project Staff facilitated the opportunity for public/private participation from numerous hazard or mitigation-related agencies/organizations early on in the planning process. For this Plan, the public includes residents, businesses, property owners, and other stakeholders in the community, such as business leaders, civic groups, academia, non-profit organizations, and major employers.

A public meeting at the beginning and at the end of the planning process ensured every stakeholder adequate opportunity to participate or offer input. Moreover, the public had an opportunity to comment and provide input: during the planning process, on the draft plan at all stages of its formation, and prior to plan approval, and/or at public meetings.

To ensure public input during plan development, the Plan Development Team:

- *Held public hearings, Advisory Committee meetings, and subcommittee sessions.* To ensure every stakeholder had an opportunity to offer input on the Plan, public meetings were held both at the beginning and at the end of the planning process. The Advisory Committee convened a minimum of 12 meetings and coordinated in subcommittees in breakout sessions.
- *Solicited input from citizens and professionals with knowledge of applicable hazards.* Project Staff had discussions with hazard-related agencies, academia, and relevant stakeholders. To reach the community at-large, including those who do not attend the public meetings, solicitations included, newspaper articles, press releases, and websites.
- *Ensured review of the final draft plan, including goals and proposed mitigation projects.* Project Staff submitted the draft Plan to businesses, academia, and other private and non-profit interests and to the public at a public meeting. The draft Plan was kept in several public locations and on websites to engage residents who did not have an opportunity to attend the public meetings. Dissemination included distribution of the draft Plan to public places, such as the library, and EMA and MSD headquarters.
- *Ensured Review of Public Comment.* Public comment was collected by Project Staff, reviewed by the Advisory Committee, and incorporated into the Plan, as appropriate.

In summary, outreach activities were planned relative to the updated Plan and included public meetings, stakeholder sessions, committee meetings, press releases, and success stories. Louisville Metro has been very successful to-date with mitigation activities, including regulatory and legislation actions.

Opportunity for public comment also was provided in the following ways:

1. Committee meetings were open to the public
2. Open public meetings were held to inform the public of the planning process and to request participation
3. One-on-one visits by Project Staff with numerous agencies/organizations
4. Phone interviews with various officials from Metro offices and federal and state agencies



5. Open public meeting for review of the final Plan
6. Placement of draft Plan at executive offices as well as public libraries and government offices
7. Outreach and draft Plan posted on EMA website

As mentioned, Project Staff documented sign-in sheets, media notices, and meeting summaries, all of which are available in the office of the EMA. See the next section for detail.

2.5.1 EMA Website

During the planning process, all draft documents, agendas and references were stored on EMA's website site. The webpage is dedicated to the Louisville Metro Multi-Hazards Mitigation Plan (<http://louisvilleky.gov/EMA/Multi-Hazards+Mitigation/>). The following message, posted beginning March 2010, instructs the public on how to submit comment.

To facilitate the work of the Advisory Committee and subcommittees Louisville Metro EMA has established this web site area to provide useful information about the work of the Advisory Committee and the subcommittees (such as meeting dates, times and locations) and to have a centralized location to archive important documents utilized by the stakeholders in the process.

This undertaking is a community-wide and inclusive effort and we would welcome participation by interested members of the community. If you would like more information, please contact us at: 502-572-3458 or by e-mail jim.mckinney@louisvilleky.gov.

The website also is utilized to store annual Progress Reports for the 2005 Plan (2005 – 09), as well as summaries of programs, guidance, and ordinances.

2.5.2 Public Meeting Notices

Public meeting notices were widely distributed via print various media outlets, e-mail, fax, mass mailings, and websites. Additionally, public information activities were developed to explain the planning process and encourage input to the Advisory Committee. To facilitate comments, all solicitations included a contact name and agency (Jim McKinney, Louisville Metro EMA), phone number and postal and email addresses.

To reach the community at-large, including those who do not attend the public meetings, the draft Plan was distributed to public places, such as the library, MSD, and EMA's website.

2.5.3 Kick-Off Public Meeting

A public meeting was held April 13, 2010 at the University of Louisville's Shelby Campus to initiate the planning process. Mayor Jerry Abramson hosted the public meeting, which was attended by approximately 100 people, including journalists and news media. The focus of the Public Meeting was to introduce the planning process, request assistance from the public/private sector and citizens, collect hazard data, and to request partnerships.



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Brad Loar, FEMA Region IV, presented at the meeting, as well as General John Heltzel (KyEM Director) and local officials: Doug Hamilton (EMA), Bud Schardein (MSD), and Curt Bynum (LOJIC). In addition, the Advisory Committee officially signed the Partnering Agreement.

The media attended the public meeting and two local TV stations interviewed speakers and the interviews were shown on the noon and evening news at both stations.

Following is a list of 25 LOJIC maps displayed at the Public Meeting to showcase the existing GIS capabilities specifically in support of hazard and mitigation planning. Most of the maps were created to support the 2005 Plan and were mounted 3 foot x 4 foot boards, and displayed on easels and in slide presentations.

Louisville Metro Residential Buildings
Louisville Metro Homes Built Before 1950
Louisville Metro Homes Built Since 1990
Louisville Metro Emergency Response Facilities
Louisville Metro Hospitals and Nursing Homes
Louisville Metro Public/Private School Facilities
Louisville Metro Wastewater Treatment Facilities
Louisville Metro Early Warning Sirens
Louisville Metro Residential Subdivision Development
Louisville Metro Total Population
Louisville Metro Median Income
Louisville Metro Population Density
Louisville Metro Socially Vulnerable Populations
Louisville Metro Transportation Facilities

April 13, 2010 Public Meeting Agenda

Welcome

Bob Smith, Louisville Metro Multi-Hazards Advisory Committee Chair

Introduce the Mayor

Doug Hamilton, Director, Louisville Jefferson County EMA/MetroSafe Communications

Opening Comments

Jerry E. Abramson, Louisville Metro Mayor

CRS Class 5 Rating Plaque Ceremony

National and Regional Mitigation Perspective

Brad Loar, Director Mitigation Division, FEMA Region IV

State Mitigation Perspective

General John Heltzel, Director, KY Division of Emergency Management

National and Regional Planning Perspective

Dr. David Simpson, U of L Center for Hazards Research

Flood Mitigation Programs, MSD

Bud Schardein, Louisville & Jefferson County Metropolitan Sewer District

Local Plan Process

Doug Hamilton, Director, Louisville Metro EMA/MetroSafe Communications

LOJIC and Mapping

Curt Bynum

Partnering Agreement Signing Ceremony

Next Steps and Closing Comments

Bob Smith, Louisville Metro Multi-Hazards Advisory Committee Chair

Louisville Metro Utility Facilities
Louisville Metro High Potential Loss Facilities
Louisville Metro Major Tree Cover
Louisville Metro Floodplains
Louisville Metro Flood Vulnerability
Louisville Metro Areas of Karst Potential
Louisville Metro Karst/Sinkhole Vulnerability Score
Louisville Metro Landslide Sites
Louisville Metro Landslide Vulnerability
Louisville Metro Composite Exposure Rank
Louisville Metro Wildfire Vulnerability



At the Public Meeting, attendees indicated by a checkmark on the sign-in sheet whether they wanted to receive a copy of the draft Plan for review. Project Staff ensured that all attendees received notice of the final draft Plan and how to submit comment.

See Appendix 2.6 for the April 13, 2010 Public Meeting Handouts, including a summary of the Louisville Metro Multi-Hazards Mitigation Plan Five-Year Update process, Public Meeting Agenda, Project Staff Contact List, Planning and Timeline Requirements, Public Meeting Press Release, and a CRS Program Summary. Also included in the Appendix are media articles.

2.5.4 Public Involvement for Draft Plan

At the March 22, 2011 Advisory Committee meeting, the Draft Plan was distributed to members on a CD. Project Staff requested a 30-day review and comment period. Comments and revisions were incorporated into the Plan. The next step included distributing the Plan to the public.

2.5.4.1 Distribution of Draft Plan

A hard copy of the Draft Plan was distributed to MSD, Louisville Metro Free Public Library, and EMA and notice was sent to governing bodies, the media, and the Advisory Committee.

The following was posted on EMA's website on May 2, 2011.

DRAFT Multi-Hazard Mitigation Plan Summary

As a local community, Louisville Metro is required to develop a comprehensive Natural Hazards Mitigation Plan. The Disaster Mitigation Act of 2000 (DMA 2000) provides the legal basis for FEMA mitigation planning requirements for State, local and Indian Tribal governments as a condition of mitigation grant assistance. The legislation reinforces the importance of mitigation planning in emphasizing planning for disasters *before* they occur, thus promoting proactive emergency management planning. As such, DMA 2000 establishes a "pre-disaster hazard mitigation" program and new requirements for the post-disaster Hazard Mitigation Grant Program (HMGP).

DMA 2000 is intended to facilitate cooperation between state and local authorities as it encourages and rewards local, tribal, and state pre-disaster planning and promotes sustainability as a strategy for disaster resistance. This enhanced planning network better enables local and state governments to articulate their needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects. As a result, communities must have an approved mitigation plan in place before receiving HMGP funds.

Five Year Update: DMA 2000 requires local communities to update the Hazards Mitigation Plan on a five-year cycle. The 2010 Plan update will be renamed a Multi-Hazard Mitigation Plan and follow all guidance issued by the FEMA and the Community Rating System (CRS). In addition, the update will include Hazardous Materials HAZ/MAT as a Man-Made Hazard to be profiled for a risk assessment analysis. The updated Plan will utilize the same planning process as the original plan (See 2005 Louisville Metro Natural Hazards Mitigation Plan) and stakeholders will again be at the center of the process.



Louisville Metro Multi-Hazards Mitigation Plan Five-Year Update June 17, 2011

To facilitate the work of the Advisory Committee and subcommittees Louisville Metro EMA has established this web site area to provide useful information about the work of the Advisory Committee and the subcommittees (such as meeting dates, times and locations) and to have a centralized location to archive important documents utilized by the stakeholders in the process.

DRAFT Plan Open for Public Comment (May 2 – June 12, 2011)

The Louisville Metro Emergency Management Agency (EMA), in partnership with the Louisville/Jefferson County Metropolitan Sewer District (MSD) and LOJIC, is seeking public comment on the Draft Multi-Hazard Mitigation Plan.

The plan, updated every five years, is required under federal law to help communities to better prepare for natural and hazardous-materials disaster events and establishes eligibility for federal grants to support hazard mitigation planning efforts. Louisville Metro has been determined to be vulnerable to 13 distinct hazards. The plan identifies these hazards and outlines specific actions for mitigation. The planning process, which began over a year ago, has been led by an advisory committee made up of over 60 local agencies, organizations, and citizen stakeholders.

The development of the Multi-Hazard Mitigation Plan undertaking is a community-wide and inclusive effort and we welcome participation by interested members of the community. See below for information on how to review and comment.

Review and Comment on the DRAFT Plan

You can follow the links on this website.

Comments due by June 12, 2011

To Submit Comment Contact:

Jim McKinney, Louisville Metro EMA

[Contact to Review Multi Hazards Mitigation Plan](#)

2.5.4.2 Public Meeting for Plan Review

A public meeting was held June 2, 2011 at the Air Pollution Control Board. The focus of the Public Meeting was to introduce the Draft Plan and request review and comment from the public and local stakeholders. LOJIC maps were displayed at the Public Meeting to showcase the Risk Assessments for the 13 hazards.

During the 45-day public review process, no comments were submitted. As a result, no revisions were needed on the Plan.

See Appendix 2.7 for the June 2, 2011 Draft Plan Public Meeting agenda, handouts, and the Public Meeting Press Release.

June 2, 2011 Public Meeting Agenda

Welcome & Project Staff Introductions

Bob Smith, Louisville Metro Multi-Hazards Advisory Committee Chair

Five-Year Update, Louisville Metro's Planning Process

Pamela Moore, Project Staff

Risk Assessment for Natural Hazards and Hazardous-Materials

Josh Human, Project Staff

Flood Hazard in 11 Watersheds

David Johnson, Project Staff

Mitigation and the Five-Year Action Plan

Pamela Moore, Project Staff

How to Comment, Next Steps for FEMA, State and Local Approval

Bob Smith

Open Discussion

Project Staff available to discuss maps and take additional comment



2.6 Hazard Mitigation Plan Adoption, Submission and Approval

Adoption by the local governing body demonstrates the jurisdiction's commitment to fulfilling the mitigation goals and objectives outlined in the plan. Adoption legitimizes the plan and authorizes responsible agencies to execute their responsibilities. The local jurisdiction submitting the plan must satisfy the prerequisite before the plan can be approved by FEMA.

2.6.1 Local Adoption - Prerequisite

Louisville Metro government has 26 Metro Council members representing 100% of the Louisville/Jefferson County area population. Representatives of the 26-member Metro Council are the legislative body for Louisville Metro and have the authority to enact the Multi-Hazards Mitigation Plan and execute it via all government agencies.

At the beginning of the Planning Process, a Partnering Agreement was drafted and signed by community representatives serving on the Advisory Committee. The Partnering Agreement includes the Mission Statement, signatures, and states the commitment to the planning process by the Advisory Committee. The Partnering Agreement was submitted to Metro Council for formal recognition via a Resolution. The Resolution and Partnering Agreement show early support of a local plan, which the Metro Council will be asked to endorse and will codify government ability to adopt and enact. See Appendices 2.2 and 2.3 for the Partnering Agreement and Resolution.

2.6.2 Plan Submittal Process

The Plan submittal process begins with Louisville Metro EMA submitting the Plan to the KyEM for review and comment and then incorporating any revisions. KyEM submits the Plan to FEMA Region IV for approval, pending local adoption status.

Once the Plan is certified approvable by FEMA, EMA submits the Plan to Metro Council for formal adoption and then resubmits to State and FEMA for final review and approval. A signed copy of the executed Resolution and formal Adoption by the Louisville Metro Government will be included in the final Plan.

Timeframe for FEMA Review: Once a final plan is submitted, the FEMA Regional Office will complete the review within 45 days from the day it is received, *whenever possible*. In the event that the plan is not approved, the FEMA Regional Office will provide comments on the areas that need improvement.

Plan Evaluation Methodology: FEMA reviewers document their evaluation of the plan using the Local Mitigation Plan Review Crosswalk. Local Mitigation Plans are approved when they receive a "Satisfactory" for all requirements under 44 CFR §201.6. Except for prerequisites that are met before the plan can be approved, the reviewer evaluates requirements based on the following system:

Plan Submittal and Review Procedures

The mitigation planning regulations under 44 CFR Part 201 require that local jurisdictions submit mitigation plans to the State Hazard Mitigation Officer (SHMO) for initial review and coordination, with the State then forwarding the plans to FEMA for formal review and approval.



Louisville Metro Multi-Hazards Mitigation Plan Five-Year Update June 17, 2011

N Needs Improvement: The plan does not meet the minimum for the requirement. Reviewer's comments are provided.

S Satisfactory: The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

The final, completed Local Mitigation Plan Review Crosswalk provides the local jurisdiction with:

- A determination for each requirement
- FEMA reviewer comments for requirements that need improvement
- FEMA reviewer "recommended revisions" that are not required but offer suggestions on areas to enhance the mitigation plan
- A determination of whether the plan is approved by the State and FEMA